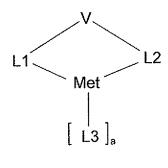
### **AMENDMENTS TO THE CLAIMS**

Docket No.: 14113-00003-US

# 1. (Currently Amended) Compounds of structure 1 A compound of the Structure 1



Structure 1

characterised in that they contain wherein Structure 1 contains a metal Met, coordinated to a tetradentate chelating ligand Lig of structure 2 Structure 2

where V is a bridging unit, characterised in that it which contains 1 to 40 atoms from the third, fourth, fifth and/or sixth main group and connects the two ligand moieties L1 and L2, which may be identical or different on each occurrence, covalently to one another, and where the two ligand moieties L1 and L2 satisfy structure 3 Structure 3

where Cy1 and Cy2, identically or differently on each occurrence, correspond to a substituted or unsubstituted, saturated, unsaturated or aromatic homo- or heterocyclic ring, which is in each

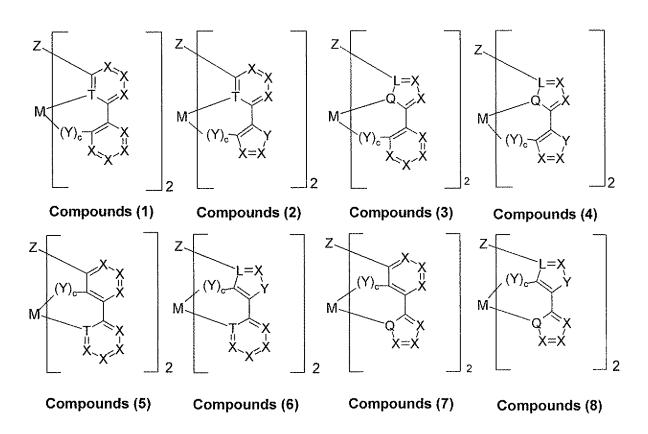
case bonded ionically, covalently or coordinatively to the metal via a ring atom or via an atom bonded exocyclically to the homo- or heterocyclic ring;

and where L3, identically or differently on each occurrence, is a mono- or bidentate, neutral or monoanionic ligand, and where a is 0, 1 or 2.

- 2. (Currently Amended) Compounds-The compound according to Claim 1, characterised in that they are wherein the compound is electrically neutral.
- 3. (Currently Amended) Compounds The compound according to Claim 1, characterised in that wherein L1 = L2.
- 4. (Currently Amended) Compounds The compound according to claim 1, characterised in that wherein the bridging unit V contains 1 to 6 atoms or is a 3- to 6-membered homo- or heterocyclic ring.
- 5. (Currently Amended) Compounds The compound according to claim 1, characterised in that wherein the following applies to the linking unit V:
- V is BR¹, -(CR₂)R¹B(CR₂)-, -O-R¹B-O-, -O-(R¹O)B-O-, -CR₂O-R¹B-OCR₂-, -(CR₂CR₂)R¹B(CR₂CR₂)-, C=O, C=NR¹, C=S, CR₂, CR(OH), CR(OR¹), C(NR¹)₂, -(CR₂)R₂C(CR₂)-, -(CR₂CR₂)R₂C(CR₂CR₂)-, -(SiR₂)R₂C(SiR₂)-, -(SiR₂CR₂)R₂C(CR₂SiR₂)-, -(CR₂SiR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂C(CR₂SiR₂)-, -(CR₂SiR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂C(SiR₂CR₂)-, -(SiR₂CR₂)R₂Si(CR₂CR₂)-, -(SiR₂CR₂)R₂Si(SiR₂)-, -(SiR₂CR₂)R₂Si(CR₂CR₂)-, -(SiR₂CR₂)R₂Si(SiR₂CR₂)-, -(SiR₂CR₂)R₂Si(CR₂CR₂)-, -(SiR₂CR₂)R₂Si(SiR₂CR₂)-, R¹N, -(CR₂CR₂)R¹N(CR₂)-, -(CR₂CR₂)R¹N(CR₂CR₂)-, FP, FPO, R¹P, R¹As, R¹Sb, R¹Bi, R¹PO, R¹AsO, R¹SbO, R¹BiO, R¹PSe, R¹AsSe, R¹SbSe, R¹BiSe, R¹PTe, R¹AsTe, R¹SbTe, R¹BiTe, -O-R¹PO-O-, -O-(R¹O)PO-O-, -CR₂O-R¹PO-OCR₂-, -OCR₂-R¹PO-CR₂O-, O, S, Se, -(CR₂)O(CR₂)-, -(CR₂)S(CR₂)-, -(CR₂)S(CR₂)-, -(CR₂)(O)S(CR₂)- or -(CR₂)(O)₂S(CR₂)- or corresponding asymmetrical analogues;
- R is, identically or differently on each occurrence, H, F, Cl, Br, I, NO<sub>2</sub>, CN, a straight-chain, branched or cyclic alkyl or alkoxy group having 1 to 20 C atoms, where one or more non-adjacent CH<sub>2</sub> groups may be replaced by  $-R^1C=CR^1-$ ,  $-C\equiv C-$ ,  $Si(R^1)_2$ ,  $Ge(R^1)_2$ ,  $Sn(R^1)_2$ , C=O, C=S, C=Se, C=NR<sup>1</sup>, -O-, -S-, -NR<sup>1</sup>- or -CONR<sup>1</sup>- and where one or more H atoms may be 695321

replaced by F, or an aryl, aryloxy or heteroaryl group having 1 to 14 C atoms, which may be substituted by one or more non-aromatic radicals R, where a plurality of substituents R may in turn define a further mono- or polycyclic, aliphatic or aromatic ring system; and

- R<sup>1</sup>, R<sup>2</sup> are, identically or differently on each occurrence, H or an aliphatic or aromatic hydrocarbon radical having 1 to 20 C atoms.
- 6. (Currently Amended) Metal complexes according to claim 5 The compound as claimed in claim 5, selected from compounds (1) to (8), each of which may also carry one or two additional ligands L3

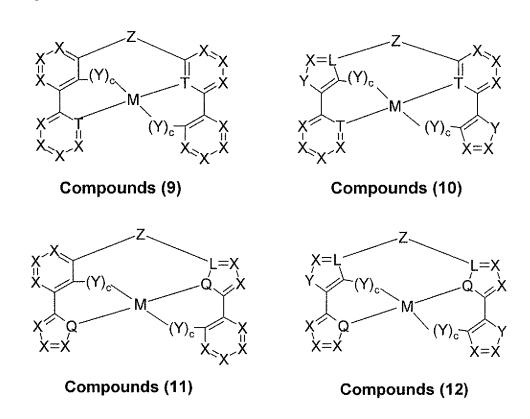


where R, R<sup>1</sup> and R<sup>2</sup> have the same meaning as described in Claim 5, and the other symbols and indices have the following meaning:

M is Be, Mg, Ca, Sr, Ba, Al, Ga, In, Tl, Sc, Y, La, Cr, Mo, W, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd or Hg;

L is, identically or differently on each occurrence, C, N or P;

- Q is, identically or differently on each occurrence, N, O, S, Se or Te;
- T is, identically or differently on each occurrence, N or P;
- X is, identically or differently on each occurrence, CR, N or P;
- Y is, identically or differently on each occurrence, NR<sup>1</sup>, O, S, Se, Te, SO, SeO, TeO, SO<sub>2</sub>, SeO<sub>2</sub> or TeO<sub>2</sub>;
- Z has the same meaning as described for V in Claim 5;
- c is, identically or differently on each occurrence, 0 or 1.
- 7. (Currently Amended) Metal complexes according to claim The compound as claimed in claim 5, selected from compounds (9) to (12), each of which may also carry one or two additional ligands L3



where the symbols and indices R, R<sup>1</sup> and R<sup>2</sup> have the same meanings as in claim 5 and

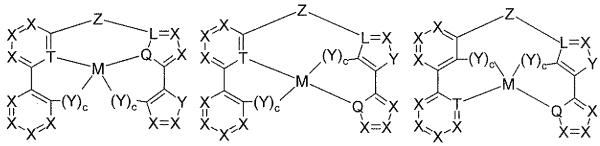
M is Be, Mg, Ca, Sr, Ba, Al, Ga, In, Tl, Sc, Y, La, Cr, Mo, W, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd or Hg;

- L is, identically or differently on each occurrence, C, N or P;
- Q is, identically or differently on each occurrence, N, O, S, Se or Te;
- T is, identically or differently on each occurrence, N or P;
- X is, identically or differently on each occurrence, CR, N or P;
- Y is, identically or differently on each occurrence, NR<sup>1</sup>, O, S, Se, Te, SO, SeO, TeO, SO<sub>2</sub>, SeO<sub>2</sub> or TeO<sub>2</sub>;
- Z has the same meaning as described for V in Claim 5;
- c is, identically or differently on each occurrence, 0 or 1.
- 8. (Currently Amended) Metal complexes according to claim 5 The compound as claimed in claim 5, selected from compounds (13) to (30), each of which may also carry one or two additional ligands L3

Compounds (13) Compounds (14)

Compounds (15)

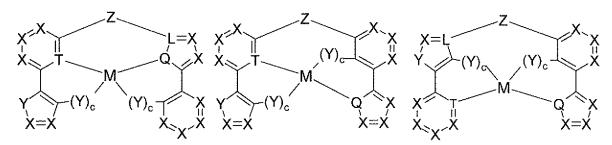
Docket No.: 14113-00003-US



Compounds (19)

Compounds (20)

Compounds (21)



Compounds (22)

Compounds (23)

Compounds (24)

8

Reply to Office Action of June 11, 2009

Docket No.: 14113-00003-US

where the symbols and indices R, R<sup>1</sup> and R<sup>2</sup> have the same meanings as in claim 5 and

M is Be, Mg, Ca, Sr, Ba, Al, Ga, In, Tl, Sc, Y, La, Cr, Mo, W, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd or Hg;

- L is, identically or differently on each occurrence, C, N or P;
- is, identically or differently on each occurrence, N, O, S, Se or Te; Q
- T is, identically or differently on each occurrence, N or P;
- $\mathbf{X}$ is, identically or differently on each occurrence, CR, N or P;
- is, identically or differently on each occurrence, NR<sup>1</sup>, O, S, Se, Te, SO, SeO, TeO, Y  $SO_2$ ,  $SeO_2$  or  $TeO_2$ ;
- Z has the same meaning as described for V in Claim 5;
- is, identically or differently on each occurrence, 0 or 1. c
- 9. (Currently Amended) Metal complexes according to claim 1, characterised in that The compound as claimed in claim 1, wherein ligand L3, if present, is a bidentate chelating ligand.
- 10. (Currently Amended) Metal complexes-The compound according to Claim 9, characterised in that wherein L3 is present and is a monoanionic ligand which is identical to or different from ligand moieties L1 and L2 or in that L3 is a ligand of structure (4)

9

$$R^3$$
 $R^3$ 
 $R^3$ 

Docket No.: 14113-00003-US

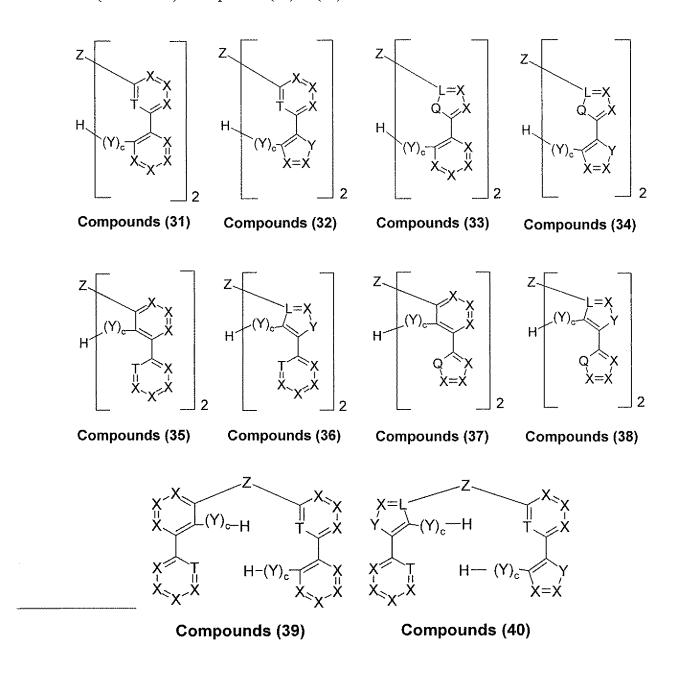
Structure (4)

where  $R^3$ , identically or differently on each occurrence, represents H, a  $C_1$  to  $C_{20}$  alkyl group, a  $C_1$  to  $C_{20}$  alkoxy group, a  $C_4$  to  $C_{20}$  aryl or heteroaryl group or a  $C_4$  to  $C_{20}$  aryloxy or heteroaryloxy group, and one or more H atoms may be replaced by F.

- 11. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol M = Be, Mg, Pt or Zn, and the index a = 0.
- 12. (Currently Amended) Compounds The compound according to Claim 11, eharacterised in that wherein the symbol c = 0 and M = Pt.
- 13. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol M = Rh or Ir, and the index a = 1 in the case of a bidentate monoanionic ligand L3 or a = 2 in the case of a monodentate monoanionic ligand L3.
- 14. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol L = C or N.
- 15. (Currently Amended) Compounds The compound according to claim 1, characterised in that wherein the symbol Q = O or S.
- 16. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol T = N.
- 17. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol X = CR or N.
- 18. (Currently Amended) Compounds The compound according to claim 6, characterised in that wherein the symbol  $Z = BR^1$ ,  $CR_2$ , CO,  $SiR^1_2$ ,  $R^1N$ , FP, FPO,  $R^1P$ ,  $R^1PO$ ,  $-CR_2CR_2$ -,  $-CR_2-O-CR_2$ -,  $-O-(OR^1)PO-O$ -, cis- $-CR_2-BR^1-CR_2$ -,  $-CR_2-CO-CR_2$ -,  $-CR_2-CR_2-CR_2$  or  $-CR_2-NR^1-CR_2$ .

19. (Currently Amended) Compounds The compound according to claim 5, characterised in that wherein the symbol R = H, F, Cl, Br, I, CN, a straight-chain, branched or cyclic alkyl or alkoxy group having 1 to 6 C atoms or an aryl or heteroaryl group having 3 to 10 C atoms, which may be substituted by one or more non-aromatic radicals R, where a plurality of substituents R, both on the same ring and also on the two different rings, may together in turn define a further mono- or polycyclic ring system.

## 20. (Withdrawn) Compounds (31) to (60)



Compounds (50)

12

Compounds (51)

Compounds (49)

Compounds (60)

where the symbols and indices L, Q, T, X, Y, Z, R, R<sup>1</sup>, R<sup>2</sup> and c have the same meanings as in Claim 7, apart from the compounds bis(6-phenyl-2-pyridyl)methane, bis(6-phenyl-2-pyridyl) ketone, bis(6-(1-hydroxy-3,5-di-tert-butyl)phenyl-2-pyridyl)methanol, 2,2′-thiobis(3-cyano-2,4-diphenyl)pyridine, bis(6-(3-phenyl)phenyl-2-pyridyl)methane and isomers.

Compounds (59)

#### 21. (Cancelled)

Compounds (58)

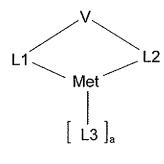
22. (Currently Amended) Compounds The compound according to claim 1, characterised in that their wherein the compound has a purity (determined by <sup>1</sup>H-NMR and/or HPLC) that is greater than 99%.

#### 23. (Cancelled)

24. (Currently Amended) Polymers or dendrimers The polymer or dendrimer according to Claim 23, characterised in that Claim 30, wherein at least one radical R represents a bond to the polymer or dendrimer.

Docket No.: 14113-00003-US

- 25. (Currently Amended) Polymers The polymer according to claim 24, characterised in that wherein the polymer is selected from the group of the polyfluorenes, polyspirobifluorenes, poly-para phenylenes, polydihydrophenanthrenes, polyindenofluorenes, polycarbazoles, polythiophenes, polyketones, polyvinylcarbazoles a polyfluorene, polyspirobifluorene, poly-paraphenylene, polydihydrophenanthrene, polyindenofluorene, polycarbazole, polythiophene, polyketone, polyvinylcarbazole or from copolymers which have a plurality of the units mentioned here.
- 26. (Currently Amended) An electronic device comprising at least a polymer, a copolymer or a dendrimer according to claim 23 claim 30.
- 27. (Currently Amended) The electronic Electronic device according to Claim 26, characterised in that it wherein the device is an organic light-emitting diode (OLED), an organic integrated circuit (O-IC), an organic field-effect transistor (OFET), an organic thin-film transistor (OTFT), an organic solar cell (O-SC) or an organic laser diode (O-laser).
- 28. (Previously presented) An electronic device comprising at least one compound according to claim 1.
- 29. (New) A process for the preparation of a compound of Structure 1



Structure 1

Reply to Office Action of June 11, 2009

wherein Structure 1 contains a metal Met, coordinated to a tetradentate chelating ligand Lig of Structure 2

Docket No.: 14113-00003-US

where V is a bridging which contains 1 to 40 atoms from the third, fourth, fifth and/or sixth main group and connects the two ligand moieties L1 and L2, which may be identical or different on each occurrence, covalently to one another, and where the two ligand moieties L1 and L2 satisfy Structure 3

Structure 3

where Cy1 and Cy2, identically or differently on each occurrence, correspond to a substituted or unsubstituted, saturated, unsaturated or aromatic homo- or heterocyclic ring, which is in each case bonded ionically, covalently or coordinatively to the metal via a ring atom or via an atom bonded exocyclically to the homo- or heterocyclic ring;

and where L3, identically or differently on each occurrence, is a mono- or bidentate, neutral or monoanionic ligand, and where a is 0, 1 or 2,

which comprises reacting compounds (31) to (60) with metal alkoxides of compound (61), with metal ketoketonates of compound (62), metal halides, carboxylates, nitrates and sulfates of compound (63) or alkyl- or arylmetal compounds of compound (64)

Docket No.: 14113-00003-US

Compounds (43)

Compounds (44)

Compounds (45)

Compounds (46)

Compounds (47)

Compounds (48)

Compounds (49)

Compounds (50)

Compounds (51)

Compounds (52)

Compounds (53)

17

Compounds (54)

Application No. 10/578,039 Docket No.: 14113-00003-US

Reply to Office Action of June 11, 2009

wherein

L is, identically or differently on each occurrence, C, N or P;

Q is, identically or differently on each occurrence, N, O, S, Se or Te;

T is, identically or differently on each occurrence, N or P;

X is, identically or differently on each occurrence, CR, N or P;

Y is, identically or differently on each occurrence, NR<sup>1</sup>, O, S, Se, Te, SO, SeO, TeO, SO<sub>2</sub>, SeO<sub>2</sub> or TeO<sub>2</sub>;

R<sup>1</sup> are, identically or differently on each occurrence, H or an aliphatic or aromatic hydrocarbon radical having 1 to 20 C atoms;

$$\begin{split} Z & \quad \text{is BR}^1, -(CR_2)R^1B(CR_2)\text{-, -O-R}^1B\text{-O-, -O-(R}^1O)B\text{-O-, -CR}_2O\text{-}R^1B\text{-OCR}_2\text{-,} \\ -(CR_2CR_2)R^1B(CR_2CR_2)\text{-, C=O, C=NR}^1, C=S, CR_2, CR(OH), CR(OR^1), C(NR^1)_2, \\ -(CR_2)R_2C(CR_2)\text{-, -(CR}_2CR_2)R_2C(CR_2CR_2)\text{-, -(SiR}_2)R_2C(SiR_2)\text{-, -(SiR}_2CR_2)R_2C(CR_2SiR_2)\text{-,} \\ -(CR_2SiR_2)R_2C(SiR_2CR_2)\text{-, -(SiR}_2SiR_2)R_2C(SiR_2SiR_2)\text{-, cis-RC=CR, 1,2-C}_6H_4, 1,3-C_6H_4, SiR_2, \\ Si(OH)_2, Si(OR^1)_2, -(CR_2)R_2Si(CR_2)\text{-, -(CR}_2CR_2)R_2Si(CR_2CR_2)\text{-, -(SiR}_2)R_2Si(SiR}_2)\text{-,} \\ \end{split}$$

-(SiR<sub>2</sub>CR<sub>2</sub>)R<sub>2</sub>Si(CR<sub>2</sub>SiR<sub>2</sub>)-, -(CR<sub>2</sub>SiR<sub>2</sub>)R<sub>2</sub>Si(SiR<sub>2</sub>CR<sub>2</sub>)-, -(SiR<sub>2</sub>SiR<sub>2</sub>)R<sub>2</sub>Si(SiR<sub>2</sub>SiR<sub>2</sub>)-, R<sup>1</sup>N, -(CR<sub>2</sub>)R<sup>1</sup>N(CR<sub>2</sub>)-, -(CR<sub>2</sub>CR<sub>2</sub>)R<sup>1</sup>N(CR<sub>2</sub>CR<sub>2</sub>)-, FP, FPO, R<sup>1</sup>P, R<sup>1</sup>As, R<sup>1</sup>Sb, R<sup>1</sup>Bi, R<sup>1</sup>PO, R<sup>1</sup>AsO, R<sup>1</sup>SbO, R<sup>1</sup>BiO, R<sup>1</sup>PSe, R<sup>1</sup>AsSe, R<sup>1</sup>SbSe, R<sup>1</sup>BiSe, R<sup>1</sup>PTe, R<sup>1</sup>AsTe, R<sup>1</sup>SbTe, R<sup>1</sup>BiTe, -O-R<sup>1</sup>PO-O-, -O-(R<sup>1</sup>O)PO-O-, -CR<sub>2</sub>O-R<sup>1</sup>PO-OCR<sub>2</sub>-, -OCR<sub>2</sub>-R<sup>1</sup>PO-CR<sub>2</sub>O-, O, S, Se, -(CR<sub>2</sub>)O(CR<sub>2</sub>)-, -(CR<sub>2</sub>)S(CR<sub>2</sub>)-, -(CR<sub>2</sub>)(O)S(CR<sub>2</sub>)- or -(CR<sub>2</sub>)(O)<sub>2</sub>S(CR<sub>2</sub>)- or corresponding asymmetrical analogues;

c is, identically or differently on each occurrence, 0 or 1,

$$M(OR^1)_n$$
  $A_q = M = O = R^1 = MA_n$   $MA_n$   $(R^1)_2 ML'_2$ 

Compounds (61) Compounds (62) Compounds (63) Compounds (64)

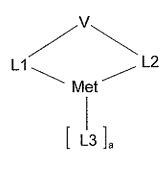
wherein the symbols M and R<sup>1</sup>,

M is Be, Mg, Ca, Sr, Ba, Al, Ga, In, Tl, Sc, Y, La, Cr, Mo, W, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd or Hg;

R<sup>1</sup> are, identically or differently on each occurrence, H or an aliphatic or aromatic hydrocarbon radical having 1 to 20 C atoms;

and the symbol A = F, Cl, Br, I, OH, formate, acetate, propionate, benzoate, nitrate or sulfate, and L' is a monodentate ligand and n = 1, 2 or 3 and q = 0, 1, 2 or 3.

30. (New) A cojugated, partially conjugated and/or non-conjugated polymer or dendrimer comprising one or more compounds of Structure 1



Structure 1

wherein Structure 1 contains a metal Met, coordinated to a tetradentate chelating ligand Lig of Structure 2

where V is a bridging unit which contains 1 to 40 atoms from the third, fourth, fifth and/or sixth main group and connects the two ligand moieties L1 and L2, which may be identical or different on each occurrence, covalently to one another, and where the two ligand moieties L1 and L2 satisfy Structure 3

where Cy1 and Cy2, identically or differently on each occurrence, correspond to a substituted or unsubstituted, saturated, unsaturated or aromatic homo- or heterocyclic ring, which is in each case bonded ionically, covalently or coordinatively to the metal via a ring atom or via an atom bonded exocyclically to the homo- or heterocyclic ring;

Structure 3

and where L3, identically or differently on each occurrence, is a mono- or bidentate, neutral or monoanionic ligand, and where a is 0, 1 or 2,

or compounds (1) to (12)

wherein

is, identically or differently on each occurrence, H, F, Cl, Br, I, NO<sub>2</sub>, CN, a straight-chain, branched or cyclic alkyl or alkoxy group having 1 to 20 C atoms, where one or more non-adjacent CH<sub>2</sub> groups may be replaced by -R<sup>1</sup>C=CR<sup>1</sup>-, -C≡C-, Si(R<sup>1</sup>)<sub>2</sub>, Ge(R<sup>1</sup>)<sub>2</sub>, Sn(R<sup>1</sup>)<sub>2</sub>, C=O, C=S, C=Se, C=NR<sup>1</sup>, -O-, -S-, -NR<sup>1</sup>- or -CONR<sup>1</sup>- and where one or more H atoms may be replaced by F, or an aryl, aryloxy or heteroaryl group having 1 to 14 C atoms, which may be substituted by one or more non-aromatic radicals R, where a plurality of substituents R may in turn define a further mono- or polycyclic, aliphatic or aromatic ring system;

R<sup>1</sup>, R<sup>2</sup> are, identically or differently on each occurrence, H or an aliphatic or aromatic hydrocarbon radical having 1 to 20 C atoms;

M is Be, Mg, Ca, Sr, Ba, Al, Ga, In, Tl, Sc, Y, La, Cr, Mo, W, Fe, Ru, Os, Co, Rh, Ir, Ni, Pd, Pt, Cu, Ag, Au, Zn, Cd or Hg;

- L is, identically or differently on each occurrence, C, N or P;
- Q is, identically or differently on each occurrence, N, O, S, Se or Te;
- T is, identically or differently on each occurrence, N or P;
- X is, identically or differently on each occurrence, CR, N or P;
- Y is, identically or differently on each occurrence, NR<sup>1</sup>, O, S, Se, Te, SO, SeO, TeO, SO<sub>2</sub>, SeO<sub>2</sub> or TeO<sub>2</sub>;

Application No. 10/578,039 Reply to Office Action of June 11, 2009

 $\label{eq:sum_of_control_control} Z \qquad is $BR^1, -(CR_2)R^1B(CR_2)-, -O-R^1B-O-, -O-(R^1O)B-O-, -CR_2O-R^1B-OCR_2-, \\ -(CR_2CR_2)R^1B(CR_2CR_2)-, C=O, C=NR^1, C=S, CR_2, CR(OH), CR(OR^1), C(NR^1)_2, \\ -(CR_2)R_2C(CR_2)-, -(CR_2CR_2)R_2C(CR_2CR_2)-, -(SiR_2)R_2C(SiR_2)-, -(SiR_2CR_2)R_2C(CR_2SiR_2)-, \\ -(CR_2SiR_2)R_2C(SiR_2CR_2)-, -(SiR_2SiR_2)R_2C(SiR_2SiR_2)-, cis-RC=CR, 1,2-C_6H_4, 1,3-C_6H_4, SiR_2, \\ Si(OH)_2, Si(OR^1)_2, -(CR_2)R_2Si(CR_2)-, -(CR_2CR_2)R_2Si(CR_2CR_2)-, -(SiR_2)R_2Si(SiR_2)-, \\ -(SiR_2CR_2)R_2Si(CR_2SiR_2)-, -(CR_2SiR_2)R_2Si(SiR_2CR_2)-, -(SiR_2SiR_2)R_2Si(SiR_2SiR_2)-, R^1N, \\ -(CR_2)R^1N(CR_2)-, -(CR_2CR_2)R^1N(CR_2CR_2)-, FP, FPO, R^1P, R^1As, R^1Sb, R^1Bi, R^1PO, R^1AsO, \\ R^1SbO, R^1BiO, R^1PSe, R^1AsSe, R^1SbSe, R^1BiSe, R^1PTe, R^1AsTe, R^1SbTe, R^1BiTe, -O-R^1PO-O-, -O-(R^1O)PO-O-, -CR_2O-R^1PO-OCR_2-, -OCR_2-R^1PO-CR_2O-, O, S, Se, -(CR_2)O(CR_2)-, \\ -(CR_2)S(CR_2)-, -(CR_2)(O)S(CR_2)- or -(CR_2)(O)_2S(CR_2)- or corresponding asymmetrical analogues; and$ 

c is, identically or differently on each occurrence, 0 or 1;

or compounds (13) to (30)

where the symbols and indices R, R<sup>1</sup>, R<sup>2</sup>, M, L, Q, T, X, Y, Z and c are defined above.